

KPDES



**KENTUCKY POLLUTANT
DISCHARGE ELIMINATION
SYSTEM**

PERMIT

**AUTHORIZATION TO DISCHARGE UNDER THE
KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM**

PERMIT NO.: KYGE40000

AGENCY INTEREST NO.: 35050

Pursuant to Authority in KRS 224,

Coal Mining, Processing and Associated Activities

is authorized to discharge from a facility located at the

Eastern Kentucky Coal Field

Bath, Bell, Boyd, Breathitt, Carter, Clay, Cumberland, Elliott, Estill, Floyd, Greenup, Harlan, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lewis, Madison, Magoffin, Martin, McCreary, Menifee, Montgomery, Morgan, Owsley, Perry, Pike, Powell, Pulaski, Rockcastle, Rowan, Wayne, Whitley or Wolfe counties, Kentucky

to receiving waters named

Various water bodies within the Big Sandy, Little Sandy, Tygarts, and Upper Cumberland River basins, and portions of the Kentucky and Licking River basins

in accordance with effluent limitations, monitoring requirements and other conditions set forth in this permit.

This permit shall become effective on October 1, 2019.

This permit and the authorization to discharge shall expire at midnight, September 30, 2024.

August 29, 2019

Date Signed

Peter T. Goodman, Director

Division of Water

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SECTION 1

COVERAGE

1. COVERAGE

Establishments engaged in the mining and/or processing of coal and associated activities within the counties of Bath, Bell, Boyd, Breathitt, Carter, Clay, Cumberland, Elliott, Estill, Floyd, Greenup, Harlan, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lewis, Madison, Magoffin, Martin, McCreary, Menifee, Montgomery, Morgan, Owsley, Perry, Pike, Powell, Pulaski, Rockcastle, Rowan, Wayne, Whitley or Wolfe. At any time after coverage under this general permit is granted to a facility, the permittee may elect to opt out of the general permit by filing Forms 1 and C to obtain an individual KPDES permit. The general permit coverage will remain in effect until the individual permit becomes effective.

1.1. Eligibility

Only those coal mining and/or processing operations meeting the following requirements are eligible for coverage under KYGE40000 (KYGE4):

- 1) are physically located within the Kentucky counties listed in Section 1, and
- 2) have obtained a Surface Mining Control and Reclamation Act (SMCRA) permit from Department for Natural Resources (DNR) or are in the process of obtaining a SMCRA permit.

1.2. Exclusions

The following are excluded from coverage under this general permit:

- 1) Coal mining and/or processing operations that directly discharge to or propose to directly discharge to a receiving water body that has been categorized as an "Impaired Water" for a pollutant or pollutants of concern that may be associated with such activities and for which an approved Total Maximum Daily Load (TMDL) has been developed;
- 2) Coal mining and/or processing operations that directly discharge to or propose to directly discharge to a receiving water body that has been designated as Coldwater Aquatic Habitat (CAH) as listed in 401 KAR 10:026, Section 5 Table C;
- 3) Coal mining and/or processing operations that directly discharge to or propose to directly discharge to a receiving water body that has been designated as an Outstanding State Resource Water (OSRW) due its support of a federally listed Threatened or Endangered Species as listed in 401 KAR 10:026, Section 5 Table C;
- 4) Coal mining and/or processing operations that directly discharge to or propose to directly discharge to a receiving water body that has been categorized as an Outstanding National Resource Water (ONRW) as listed in 401 KAR 10:030, Section 1 Table 1;
- 5) New or expanded coal mining and/or processing operations that propose to discharge within five (5) miles upstream of any existing domestic water supply intake as listed in 401 KAR 10:026, Section 5 Table B; or
- 6) Coal mining and processing activities that Division of Water (DOW) has determined would be more appropriately addressed by an individual permit or an alternate general permit.

SECTION 2

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

This section of the permit establishes the KPDES effluent limitations and monitoring requirements for all outfalls listed in the Eastern Kentucky Coal General Permit Coverage Letter (EKCL) issued by the DOW granting authorization to discharge in accordance with the requirements of KYGE4. The EKCL lists each permitted outfall and the effluent limitations and monitoring requirements that are applicable to that outfall.

2.1. Underground Workings, and Coal Preparation Plants and Associated Areas

The following effluent limitations and monitoring requirements apply to discharges from any KPDES outfall that receives drainage from underground workings of an underground mine both active and post mining, coal preparation plants, and/or coal preparation plant associated areas. Coal preparation plant means a facility where coal is subjected to cleaning, concentrating, or other processing or preparation in order to separate coal from its impurities. Coal preparation plant associated areas means the coal preparation plant yards, immediate access roads, coal refuse piles and coal storage piles and facilities.

TABLE 1.							
EFFLUENT LIMITATIONS						MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Minimum	Monthly Average	Daily Maximum	Maximum	Frequency	Sample Type
Flow	MGD	N/A	Report	Report	N/A	2/Month	Instantaneous
Total Suspended Solids ¹	mg/l	N/A	35	70	N/A	2/Month	Grab
Total Recoverable Iron ¹	mg/l	N/A	3.0	4.0	N/A	2/Month	Grab
Total Recoverable Manganese ¹	mg/l	N/A	2.0	4.0	N/A	2/Month	Grab
pH	SU	6.0	N/A	N/A	9.0	2/Month	Grab
Acute WET ²	TU _A	N/A	N/A	N/A	1.00	1/Quarter	Grab
Report Due (W) ³	Yes=1 No=0	N/A	Report	N/A	N/A	1/Quarter	N/A
Specific Conductivity	µS/cm	N/A	Report	Report	N/A	2/Month	Grab
Total Sulfate (as SO ₄)	mg/l	N/A	Report	Report	N/A	2/Month	Grab
Total Recoverable Selenium	µg/l	N/A	5.0 ⁽⁴⁾	Report	N/A	1/Quarter	Grab
Total Recoverable Selenium Fish Tissue ⁴							
Whole-Body Fish Tissue (Sample 1)	mg/kg dry wt.	N/A	N/A	N/A	8.6	⁽⁴⁾	⁽⁴⁾
Whole-Body Fish Tissue (Sample 2)	mg/kg dry wt.	N/A	N/A	N/A	8.6	⁽⁴⁾	⁽⁴⁾
Fish Fillet (Sample 1)	mg/kg dry wt.	N/A	N/A	N/A	11.3 ⁽⁵⁾	⁽⁴⁾	⁽⁴⁾
Fish Fillet (Sample 2)	mg/kg dry wt.	N/A	N/A	N/A	11.3 ⁽⁵⁾	⁽⁴⁾	⁽⁴⁾

TABLE 1.							
EFFLUENT LIMITATIONS						MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Minimum	Monthly Average	Daily Maximum	Maximum	Frequency	Sample Type
Precipitation Volume ⁶	Inches	N/A	N/A	N/A	Report	(¹)	Grab
Settleable Solids ⁶	ml/l	N/A	N/A	N/A	0.5	(¹)	Grab
Date of Storm Event ⁶	Day	N/A	Report	N/A	N/A	(¹)	N/A
Date of Sample Collection ⁶	Day	N/A	Report	N/A	N/A	(¹)	N/A
¹ See Section 4 of this permit for Alternate Precipitation Effluent Limitations (APELs) available for a qualifying precipitation event. ² See Section 3 of this permit for additional requirements related to Whole Effluent Toxicity (WET) Testing including sampling requirements. ³ Report if WET Testing report has been submitted as required in Section 3.2 of this permit. DMR Location Code is "W". ⁴ Should the quarterly average concentration of Total Recoverable Selenium exceed the trigger of 5.0 µg/l, Whole-Body Fish Tissue <u>or</u> Fish Fillet sampling shall be performed, see Section 2.9 for additional requirements. If trigger is not exceeded, use NODI Code 9 for Fish Tissue reporting. ⁵ This value is the concentration in mg/kg (dry weight) of skinless, boneless fish fillet which may be analyzed instead of whole body tissue when predator or bottom-feeding fish exceed twelve (12) inches in length. Use NODI Code 9 for Fish Tissue category when not sampled. ⁶ These parameters are required only when applying for an APEL. DMRs to show 2 sets of these parameters for 2/Month sampling. Permittees shall report one set of dates for each sampling event. If not applying for APELs, use NODI Code 9 for reporting.							

2.2. Continuous Flow Sediment Control Structures

The following effluent limitations and monitoring requirements apply to discharges from any KPDES Outfall classified as a continuous flow sediment control structure that receives drainage from active surface mining activities. For the purposes of this permit, continuous flow sediment control structures are those sediment control structures that are including but not limited to, constructed within the natural drainage way of a water body, have a continuous discharge or have an average discharge duration of 96 hours or more, or receive the drainage from the underdrain of a hollow fill.

TABLE 2.							
EFFLUENT LIMITATIONS						MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Minimum	Monthly Average	Daily Maximum	Maximum	Frequency	Sample Type
Flow	MGD	N/A	Report	Report	N/A	2/Month	Instantaneous
Total Suspended Solids ¹	mg/l	N/A	35	70	N/A	2/Month	Grab
Total Recoverable Iron ¹	mg/l	N/A	3.0	4.0	N/A	2/Month	Grab
Total Recoverable Manganese ¹	mg/l	N/A	2.0	4.0	N/A	2/Month	Grab
pH	SU	6.0	N/A	N/A	9.0	2/Month	Grab

¹See Section 4 of this permit for Alternate Precipitation Effluent Limitations (APELs) available for a qualifying precipitation event.

²See Section 3 of this permit for additional requirements related to Whole Effluent Toxicity (WET) Testing including sampling requirements.

³Report if WET Testing report has been submitted as required in Section 3.2 of this permit. DMR Location Code is "W".

⁴Should the quarterly average concentration of Total Recoverable Selenium exceed the trigger of 5.0 µg/l, Whole-Body Fish Tissue or Fish Fillet sampling shall be performed, see Section 2.9 for additional requirements. If trigger is not exceeded, use NODI Code 9 for Fish Tissue reporting.

⁵This value is the concentration in mg/kg (dry weight) of skinless, boneless fish fillet which may be analyzed instead of whole body tissue when predator or bottom-feeding fish exceed twelve (12) inches in length. Use NODI Code 9 for Fish Tissue category when not sampled.

⁶These parameters are required only when applying for an APEL. DMRs to show 2 sets of these parameters for 2/Month sampling. Permittees shall report one set of dates for each sampling event. If not applying for APELs, use NODI Code 9 for reporting.

2.3. Non-Continuous Flow Sediment Control Structures

Non-continuous flow sediment control structures are sediment control structures that do not meet the definition of a continuous flow sediment control structure. The following effluent limitations and monitoring requirements apply to discharges from any KPDES Outfall classified as a non-continuous flow sediment control structure that receives drainage from active surface mining activities.

TABLE 3.							
EFFLUENT LIMITATIONS						MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Minimum	Monthly Average	Daily Maximum	Maximum	Frequency	Sample Type
Flow	MGD	N/A	Report	Report	N/A	2/Month	Instantaneous
Total Suspended Solids ¹	mg/l	N/A	35	70	N/A	2/Month	Grab
Total Recoverable Iron ¹	mg/l	N/A	3.0	4.0	N/A	2/Month	Grab
Total Recoverable Manganese ¹	mg/l	N/A	2.0	4.0	N/A	2/Month	Grab
pH	SU	6.0	N/A	N/A	9.0	2/Month	Grab
Specific Conductivity	μS/cm	N/A	Report	Report	N/A	2/Month	Grab
Total Sulfate (as SO ₄)	mg/l	N/A	Report	Report	N/A	2/Month	Grab
Precipitation Volume ²	Inches	N/A	N/A	N/A	Report	(¹)	Grab
Settleable Solids ²	ml/l	N/A	N/A	N/A	0.5	(¹)	Grab
Date of Storm Event ²	Day	N/A	Report	N/A	N/A	(¹)	N/A
Date of Sample Collection ²	Day	N/A	Report	N/A	N/A	(¹)	N/A

¹See Section 4 of this permit for APELs available for a qualifying precipitation event.

²These parameters are required only when applying for an APEL. DMRs to show 2 sets of these parameters for 2 samples/Month. Permittees shall report one set of dates for each sampling event. If not applying for APELs, use NODI Code 9 for reporting.

2.4. Reclamation Areas

Beginning on the effective date of DOW's approval of the modification coverage to transition to reclamation status and lasting through the term of this permit, the following apply. The discharges from any KPDES Outfall classified as a continuous flow or non-continuous flow sediment control structure that receives drainage from reclamation areas only, shall comply with the following effluent limitations and monitoring requirements. Reclamation areas are defined in 401 KAR 5:065, Section 2(9) [40 CFR 434.11(l)] as "surface area of a coal mine which has been returned to required contour and on which revegetation (specifically, seeding or planting) work has commenced".

TABLE 4.							
EFFLUENT LIMITATIONS						MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Minimum	Monthly Average	Daily Maximum	Maximum	Frequency	Sample Type
Flow	MGD	N/A	Report	Report	N/A	1/Month	Instantaneous
Settleable Solids ¹	ml/l	N/A	N/A	N/A	0.5	1/Month	Grab
pH	SU	6.0	N/A	N/A	9.0	1/Month	Grab
Specific Conductivity	µS/cm	N/A	Report	Report	N/A	1/Month	Grab
Total Sulfate (as SO ₄)	mg/l	N/A	Report	Report	N/A	1/Month	Grab
Precipitation Volume ²	Inches	N/A	N/A	N/A	Report	(¹)	Grab
Date of Storm Event ²	Day	N/A	Report	N/A	N/A	(¹)	N/A
Date of Sample Collection ²	Day	N/A	Report	N/A	N/A	(¹)	N/A

¹See Section 4 of this permit for APELs available for a qualifying precipitation event.
²These parameters are required only when applying for an APEL. DMRs to show 2 sets of these parameters for 2 samples/Month. Permittees shall report one set of dates for each sampling event. If not applying for APELs, use NODI Code 9 for reporting.

To transition from active mining effluent limitations and monitoring requirements to reclamation area effluent limitations and monitoring requirements, the following conditions apply:

- 1) There is no drainage from:
 - a) Active surface mine areas,
 - b) Underground workings of underground mines (active or post mining), or
 - c) Coal preparation plant or coal preparation plant associated areas; and
- 2) The effluent from the sediment control structure has been substantially in compliance with the water quality-based effluent limitations (WQBELs) without treatment other than sedimentation.
- 3) If a representative Reasonable Potential Analysis (RPA) sample was submitted with the renewal application for a continuous flow sediment structure, a RPA sample will still be required from each structure before it can transition to reclamation status.

The permittee shall provide certification to DOW that the required conditions are met using the electronic Notice of Intent eNOI-KYG04 form available at: <https://eec.ky.gov/Environmental-Protection/Water/PermitCert/KPDES/Documents/KYG04PermitPage.pdf>

Reporting of reclamation area requirements shall not commence before DOW's approval.

2.5. Release from Monitoring Requirements

To seek release from monitoring a designated outfall, the permittee shall provide certification to DOW that a sediment control structure has been removed pursuant to DNR approval and is no longer required to meet the effluent requirements of this permit, or that DNR has approved the release of liability of the sediment control structure as a permanent impoundment pursuant to 405 KAR 16:100, Section 2. These outfalls shall be in reclamation status per their KPDES permit, or able to meet the criteria of reclamation status prior to removal.

Termination of monitoring requirements shall not be effective until DOW modifies this permit.

2.6. Release from Permit Requirement

To terminate the KPDES permit, the permittee shall submit to DOW a copy of the DNR approved Phase III SMCRA Bond Release for the entire permitted area. The effluent limitations and monitoring requirements shall remain in effect until the notification of KPDES Inactivation is issued. The Coal Mining Effluent Limitation Guidelines (ELG) defines bond release as the time at which the appropriate regulatory authority returns a reclamation or performance bond based upon its determination that reclamation work (including, in the case of underground mines, mine sealing and abandonment procedures) has been satisfactorily completed.

2.7. Sanitary Wastewater

Sanitary wastewaters are comprised of wastewaters from bathhouses, mine offices, etc. The applicable effluent limitations and monitoring requirements are dependent upon how the effluent from the wastewater treatment plant is disposed. The effluent may be discharged directly to a water of the Commonwealth or to another treatment system such as a sediment control structure, in which case the effluent must meet secondary treatment standards prior to commingling with the wastes in the other treatment system.

The following effluent limitations and monitoring requirements apply to the direct discharge of treated sanitary wastewaters to a water of the Commonwealth. These limits apply before discharge to or mixing with the waters of the receiving stream.

TABLE 5.							
EFFLUENT LIMITATIONS						MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Minimum	Monthly Average	Weekly Average	Maximum	Frequency	Sample Type
Flow	MGD	N/A	Report	Report	N/A	1/Month	Instantaneous
Carbonaceous Biochemical Oxygen Demand (5-day)	mg/l	N/A	10	15	N/A	1/Month	Grab
Total Suspended Solids	mg/l	N/A	30	45	N/A	1/Month	Grab
Ammonia (as NH ₃ N)							
May 1 – October 31	mg/l	N/A	2.0	3.0	N/A	1/Month	Grab
November 1 – April 30	mg/l	N/A	5.0	7.5	N/A	1/Month	Grab
E. coli	#/100 ml	N/A	130	240	N/A	1/Month	Grab
Dissolved Oxygen	mg/l	7.0	N/A	N/A	N/A	1/Month	Grab
Total Residual Chlorine	mg/l	N/A	0.011	0.019	N/A	1/Month	Grab
pH	SU	6.0	N/A	N/A	9.0	1/Month	Grab

The following effluent limitations and monitoring requirements apply to the discharge of treated sanitary wastewaters to another treatment system. These limits apply before commingling with waters of the other treatment system.

TABLE 6.							
EFFLUENT LIMITATIONS						MONITORING REQUIREMENTS	
Effluent Characteristic	Units	Minimum	Monthly Average	Daily Maximum	Maximum	Frequency	Sample Type
Flow	MGD	N/A	Report	Report	N/A	1/Month	Instantaneous
Biochemical Oxygen Demand (5-day)	mg/l	N/A	30	45	N/A	1/Month	Grab
Total Suspended Solids	mg/l	N/A	30	45	N/A	1/Month	Grab
The permittee shall provide disinfection of the treated effluent prior to commingling with waters of the sediment basin.							

2.8. Standard Effluent Requirements

The discharges to waters of the Commonwealth shall not produce floating solids, visible foam or a visible sheen on the surface of the receiving waters.

2.9. Additional Requirements for Total Recoverable Selenium Monitoring

The quarterly average discharge concentration for Total Recoverable Selenium of 5.0 µg/l is a trigger, that once exceeded requires the permittee to collect and analyze fish tissue for selenium residue. The permittee may select Whole-Body Fish Tissue or Fish Fillet sampling as per the SOP referenced below in Section 2.9.1.

2.9.1. Tissue Collection and Analysis

The following requirements apply:

- 1) The permittee shall conduct the fish tissue collection and analysis after each quarter the trigger of 5.0 µg/l is exceeded;
- 2) The permittee shall conduct the fish tissue collection and analysis within the calendar month following the calendar quarter the 5.0 µg/l trigger was exceeded;
- 3) The permittee shall report the results of the analysis as Total Recoverable Selenium (Whole-Body Fish Tissue) or Total Recoverable Selenium (Fish Fillet) on the Discharge Monitoring Report (DMR) the same quarter during which the analyses were performed (See 7.6 for more information regarding reporting requirements); and
- 4) Fish tissue collection and analysis shall be performed in accordance with the DOW protocols specified in “Kentucky Division of Water (KDOW). 2019. Methods for the Collection of Selenium Residue in Fish Tissue Used to Determine KPDES Permit Compliance, Version 2.0. Kentucky Department for Environmental Protection, Division of Water, Frankfort, Kentucky. found at:
<https://eec.ky.gov/Environmental-Protection/Water/QA/BioLabSOPs/Methods%20for%20the%20Collection%20of%20Selenium%20in%20Fish%20Tissue.pdf>

2.9.2. Results of Analysis

The results of the Whole-Body Fish Tissue shall be interpreted as follows:

- 1) If less than or equal to 8.6 mg/kg dry weight selenium residue, there is no permit violation;
- 2) If greater than 8.6 mg/kg dry weight selenium residue, there is a permit violation; and
- 3) If fish tissue is not obtained, the 5.0 µg/l trigger becomes the effluent limitation and there is a permit violation.

The results of the Fish Fillet shall be interpreted as follows:

- 1) If less than or equal to 11.3 mg/kg dry weight muscle (skinless, boneless fillet) selenium residue, there is no permit violation;
- 2) If greater than 11.3 mg/kg dry weight muscle (skinless, boneless fillet) selenium residue, there is a permit violation; and
- 3) If fish tissue is not obtained, the 5.0 µg/l trigger becomes the effluent limitation and there is a permit violation.

The permittee shall report the results of the 2 required fish tissue collections of Whole-Body Fish Tissue or Fish Fillet on the DMR as Sample 1 and Sample 2.

2.10. Additional Requirements for New or Expanded Facilities

For new or expanded facilities, see Section 5 for in-stream monitoring requirements.

New facilities are those facilities not previously permitted that include:

- 1) New surface mining areas draining to continuous flow sediment control structure(s);
- 2) New underground mining that has a surface discharge; or
- 3) New coal preparation plant.

Expanded facilities are existing facilities where one or more of the following occur after the effective date of this permit:

- 1) Expanded active surface mining areas draining to a continuous flow sediment control structure include:
 - a) new acreage (greater than 10 % of the originally permitted acreage) draining to an existing continuous flow sediment control structure, or
 - b) a new fill, or the enlargement of an existing fill over its original design by 10 % or greater;
- 2) An underground mine the expansion of which necessitates a new surface discharge; or
- 3) A coal preparation plant where a new slurry impoundment is proposed or enlargement of an existing slurry impoundment is over its original design by 10 % or greater (acreage).

SECTION 3

WET TESTING REQUIREMENTS

3. WET TESTING REQUIREMENTS

The permittee shall perform Acute or Chronic WET tests on the discharge from each of the outfalls identified on the EKCL as required to conduct such testing. WET testing is not required for discharges from non-continuous sediment control structures or reclamation areas.

For new and expanded facilities as defined in Section 2.10, WET testing shall be initiated within thirty (30) days of the effective date of coverage.

With the renewal of general permit coverage for those outfalls previously approved for frequency and/or species reduction, the following applies:

Upon issuance of renewal coverage for sites with active mining, the facility shall return to quarterly WET testing with both species. If the first two consecutive quarter tests after renewal issuance are passing, the facility may apply for a reduction of monitoring frequency and/or species. (Active mining will be determined by the Division of Mine Reclamation and Enforcement (DMRE) as Active or Deferred and recorded by the Mine Status Code.)

For sites where there is no active mining (inactive), the facility may remain at the current WET monitoring frequency. (Inactive mining sites will be those not designated as active by DMRE.)

At the time of renewal coverage issuance, DOW will verify mine status with DNR.

3.1. Certified Laboratory Requirements

All laboratory analyses and tests required to demonstrate compliance with the conditions of this permit shall be performed by EEC certified general wastewater laboratories and EEC certified field-only laboratories.

3.2. Sampling Requirements

If the permittee is unable to collect the required samples within the 48 hour period due to the cessation of the discharge, the permittee shall report No Data Indicator (NODI) Code "F" (Insufficient Flow for Sampling) on the quarterly DMR for that outfall. (See Section 7.6 for additional information regarding DMRs). The permittee shall submit the WET Testing reports to the WET Coordinator as directed in Section 7.11, and document this submittal on the DMR under the parameter "Report Due (W)".

3.2.1. Acute

Two discrete grab samples shall be collected during periods of discharge at least 2 hours apart but no more than 48 hours apart. Samples shall be iced and maintained at not greater than 6°C during collection, storage, transport and until used in the test by the laboratory. Both grab samples collected shall result in a test.

3.2.2. Chronic

Three (3) sets of 2 discrete grab samples each shall be collected and composited on days 1, 3, and 5 of the discharge. The samples shall be collected during periods of discharge at least 2 hours apart but no more than 48 hours apart. The samples shall be iced and maintained at not greater than 6°C during collection, storage, transport and until used in the test by the laboratory.

3.3. Test Requirements

3.3.1. Acute

The Acute WET test requirements consists of two 48-hour static non-renewal toxicity tests with water flea (Ceriodaphnia dubia, Daphnia magna, or Daphnia pulex) and two 48-hour static non-renewal toxicity tests with fathead minnow (Pimephales promelas) performed on discrete grab samples of 100% effluent (1.00

TU_A) at the frequency specified. Testing of each sample shall begin within 36 hours of the collection of that sample.

3.3.2. Chronic

The Chronic WET test requirements consists of 1 short-term static-renewal water flea (Ceriodaphnia dubia) life-cycle test and 1 short-term static-renewal fathead minnow (Pimephales promelas) growth test on 100% effluent (1.00 TU_C) at the frequency specified. The test shall begin within 36 hours of the collection of the day 1 sample. The test shall be renewed daily using samples collected on days 1, 3, and 5 in accordance with test method specified in Section 3.6.2.

3.4. Serial Dilutions

Effluent concentrations for the tests must include the percent effluent required by the permit, and at least four additional effluent concentrations as in the following table.

TABLE 7.					
Required Percent Effluent	Dilution 1 Percent	Dilution 2 Percent	Dilution 3 Percent	Dilution 4 Percent	Dilution 5 Percent
100	20	40	60	80	100

Selection of different effluent concentrations must be approved by DOW prior to testing.

3.5. Controls

Control tests shall be conducted concurrent with effluent testing using synthetic water. The analysis will be deemed reasonable and good only if the minimum control requirements are met. Any test that does not meet the control acceptability criteria shall be repeated as soon as practicable within the monitoring period.

Within 30 days prior to initiating an effluent toxicity test, a reference toxicant test must be completed for the method used; alternatively, the reference toxicant test may be run concurrent with the effluent toxicity test.

3.5.1. Acute

Control survival is 90% or greater in test organisms held in synthetic water.

3.5.2. Chronic

For the Ceriodaphnia test: at least 80% survival of all control organisms and an average of fifteen (15) or more young per surviving female in the control solutions; and 60% of surviving control females must produce three broods.

For the fathead minnow test: at least 80% survival in controls and the average dry weight per surviving organism in control chambers equals or exceeds 0.25 mg.

3.6. Test Methods

3.6.1. Acute

All test organisms, procedures, and quality assurance criteria used shall be in accordance with Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, EPA-821-R-02-012 (5th edition), the most recently published edition of this publication, or as approved in advance by DOW.

3.6.2. Chronic

All test organisms, procedures, and quality assurance criteria used shall be in accordance with Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (4th Edition), EPA-821-R-02-013, the most recent edition of this publication, or as approved in advance by DOW.

3.7. Reduction to Single Species Testing

After at least six (6) consecutive and complete quarterly or annual passing toxicity tests using both the water flea and the fathead minnow, a request for testing with only the most sensitive species may be submitted to DOW. This request shall be submitted to the WET Coordinator through the ePortal found at: <https://eec.ky.gov/Environmental-Protection/Pages/services.aspx>

Upon approval from the WET Coordinator, the most sensitive species may be considered as representative and all subsequent compliance tests may be conducted using only that species unless directed at any time by DOW to change or revert to both.

3.8. Reduction in Monitoring Frequency

The permittee may request a reduction in the frequency of WET testing from quarterly to annual upon demonstration that no test failures, incomplete tests, or invalid tests occurred during the following specified timeframes:

- 1) Existing facilities: four (4) consecutive quarters;
- 2) New or expanded facilities: eight (8) consecutive quarters.

New and expanded facilities are defined in Section 2.10 of this permit.

This request shall be submitted to the WET Coordinator through the ePortal found at: <https://eec.ky.gov/Environmental-Protection/Pages/services.aspx>. Upon approval from the WET Coordinator, a permit modification is required for this reduction. The permittee shall submit an eNOI-KYG04 form available at:

<https://eec.ky.gov/Environmental-Protection/Water/PermitCert/KPDES/Documents/KYG04PermitPage.pdf>

In the event of the failure of an annual test or non-submission by January 28th of the year following the completion of the test, the permittee will again be subject to quarterly WET testing.

3.9. Reporting Requirements

Results of all toxicity tests conducted with any species shall be reported according to the most recent format provided by DOW as directed in Section 7.11. Notification of failed tests shall be made to DOW within five days of test completion. Test reports shall be submitted to DOW within thirty (30) days of completion. A control chart including the most recent reference toxicant test endpoints for the effluent test method (minimum of 5, up to 20 if available) shall be part of the report. If multiple tests are performed within a sampling period, the permittee shall report worst case on the DMR, and submit all test reports within 30 days of completion. Reports are to be submitted to the WET Coordinator as directed in Section 7.11.

3.10. Test Results

If noncompliance occurs in an initial test, the permittee shall repeat the test using new samples. Results of this second round of testing will be used to evaluate the persistence of the toxic event and the possible need for a Toxicity Reduction Evaluation (TRE). Request to test with only the failed species, should be submitted to the WET Coordinator as directed in Section 7.11.

A single failed initial test shall be deemed a violation.

3.10.1. Acute

Noncompliance is demonstrated if the LC_{50} is less than 100 % effluent. If noncompliance occurs in an initial test, the permittee shall repeat the test using new grab samples collected approximately twelve (12) hours apart. Sampling must be initiated within ten (10) days of completing the failed test. The second round of testing shall include both species unless approved for only the most sensitive species by the WET Coordinator.

3.10.2. Chronic

Noncompliance with the toxicity limit is demonstrated if the IC_{25} (inhibition concentration) for reproduction or growth is less than 100 % effluent. If noncompliance occurs in an initial test, the permittee must repeat the test using a new set of three (3) composite samples. Sampling must be initiated within fifteen (15) days of completing the failed test. The second round of testing shall include both species unless approved for only the most sensitive species by the WET Coordinator.

3.11. Accelerated Testing

If the second round of testing also demonstrates noncompliance, the permittee will be required to perform accelerated testing as specified in the following paragraphs.

Complete four (4) additional rounds of testing to evaluate the frequency and degree of toxicity within sixty (60) days of completing the second failed round of testing. Results of the initial and second rounds of testing specified above plus the four (4) additional rounds of testing will be used in deciding if a TRE shall be required.

If results from any two (2) of six (6) rounds of testing show a significant noncompliance with the Toxicity limit, i.e., ≥ 1.2 times the TU, or results from any four of the six tests show toxicity as defined in Section 3.10, a TRE will be required.

The permittee shall provide written notification to DOW within five (5) days of completing the accelerated testing, stating that: (1) toxicity persisted and that a TRE will be initiated; or (2) that toxicity did not persist and normal testing will resume.

Should toxicity prove not to be persistent during the accelerated testing period, but reoccur within twelve (12) months of the initial failure at a level ≥ 1.2 times the TU, then a TRE shall be required.

3.12. WET TRE

Having determined that a TRE is required, the permittee shall initiate and/or continue at least monthly testing with both species until such time as a specific TRE plan is approved by DOW. A TRE plan shall be developed by the permittee and submitted to DOW within thirty (30) days of determining a TRE is required. The plan shall be developed in accordance with the most recent Environmental Protection Agency (EPA) and DOW guidance. Questions regarding this process may be submitted to DOW.

The TRE plan shall include Toxic Identification Evaluation (TIE) procedures, treatability studies, and evaluations of: chemical usage including changes in types, handling and suppliers; operational and process procedures; housekeeping and maintenance activities; and raw materials. The TRE plan will establish an implementation schedule to begin immediately upon approval by DOW, to have duration of at least six (6) months, and not to exceed twenty-four (24) months. The implementation schedule shall include quarterly progress reports being submitted to DOW, due the last day of the month following each calendar quarter.

Upon completion of the TRE, the permittee shall submit a final report detailing the findings of the TRE and actions taken or to be taken to prevent the reoccurrence of toxicity. This final report shall include: the toxicant(s), if any are identified; treatment options; operational changes; and the proposed resolutions including an implementation schedule not to exceed one-hundred-eighty (180) days.

Should the permittee determine the toxicant(s) and/or a workable treatment prior to the planned conclusion of the TRE, the permittee shall notify DOW within five (5) days of making that determination and take appropriate actions to implement the solution within one-hundred-eighty (180) days of that notification.

All reports shall be submitted as directed in Section 7.11.

SECTION 4

ALTERNATE PRECIPITATION EFFLUENT LIMITATIONS (APELs)

4. APELS

APELS are alternate precipitation effluent limitations that may be substituted, on a case-by-case basis, for the Technology-Based Effluent Limitations (TBELs) for the monthly average of Total Recoverable Iron (TRFe), Total Recoverable Manganese (TRM), Total Suspended Solids (TSS), and Settleable Solids (SS) only. APELS are not available for WQBELs and other permit requirements.

Authorized by the Coal ELG, APELS are available for sediment control structure discharges influenced by a qualifying precipitation event, i.e. the volume of rainfall or snowmelt that occurs during a 24 hour period. APELS are available on a case-by-case basis and are a function of the size of the precipitation event and the type of drainage received by the sediment control structure. The precipitation volume is the total volume of rainfall or equivalent snow melt that has occurred during the 24 hours preceding the commencement or increase in the discharge (qualifying event).

Discharges that are influenced by precipitation that ceased more than 24 hours prior to the sampling event are not eligible for APELS. In such cases, the bypass and upset conditions found in Sections 9.13 and 9.14 may apply.

4.1. Available APELS

The following table lists the available APELS associated with each type of drainage. Where the discharge is “Commingled”, as defined below, the most stringent limitations are required. The precipitation volume referenced in the table is the volume of precipitation occurring in the 24 hours preceding the commencement or increase in the discharge (qualifying event).

The following codes are used in the Table:

- 1) **UGNC** - Discharges from underground workings of underground mines **not commingled**. “Commingled” means two or more types of drainage that are combined for treatment or discharge.
- 2) **UGC** - Discharges from underground workings of underground mines **commingled**. “Commingled” means two or more types of drainage that are combined for treatment or discharge.
- 3) **CSMD** - Discharges from controlled surface mine drainage (except steep slope and mountaintop removal). “Controlled surface mine drainage” means any surface mine drainage that is pumped or siphoned from the active mining area. “Steep slope” means surface mining activities conducted on slopes greater than 20%. “Mountaintop removal” means surface coal mining and reclamation operations that remove entire coal seams running through the upper fraction of a mountain, ridge, or hill by removing all of the overburden and creating a level plateau or gently rolling contour with no highwalls remaining.
- 4) **NSMD** - Discharges from non-controlled surface mine drainage (except steep slope and mountaintop removal). “Steep slope” means surface mining activities conducted on slopes greater than 20%. “Mountaintop removal” means surface coal mining and reclamation operations that remove entire coal seams running through the upper fraction of a mountain, ridge, or hill by removing all of the overburden and creating a level plateau or gently rolling contour with no highwalls remaining.
- 5) **SSMR** - Discharges from steep slope and mountaintop removal areas. “Steep slope” means surface mining activities conducted on slopes greater than 20%. “Mountaintop removal” means surface coal mining and reclamation operations that remove entire coal seams running through the upper fraction of a mountain, ridge, or hill by removing all of the overburden and creating a level plateau or gently rolling contour with no highwalls remaining.

- 6) **PPAA** - Discharges from coal preparation plant and coal preparation plant associated areas (excluding coal refuse disposal piles). "Coal preparation plant" means a facility where coal is subjected to cleaning, concentrating, or other processing or preparation in order to separate coal from its impurities and then loaded for transit to a consuming facility. Includes all pipes, channels, basins, tanks and all other structures and equipment that convey, contain, treat, or process any water that is used in the coal preparation plant (including slurry sediment control structures, freshwater sediment control structures, and conveyances). "Coal preparation associated areas" means coal preparation plant yards, immediate access roads, coal refuse piles, and coal storage piles and facilities.
- 7) **RA** - Discharges from reclamation areas. "Reclamation area" means the surface area of a coal mine which has been returned to required contour and on which revegetation (specifically, seeding or planting) work has commenced.

TABLE 8.		
ALTERNATE PRECIPITATION EFFLUENT LIMITATIONS		
Source Determining Effluent Limits	Precipitation Volume (PV) inches of rainfall	
	0.01 < PV ≤ 4.1	PV > 4.1
UGNC	Not Applicable	Not Applicable
UGC	Not Applicable	TRM, TSS not required The monthly average concentration for TRFe shall not exceed 3.5 mg/l
CSMD	Not Applicable	TRM, TSS not required The monthly average concentration for TRFe shall not exceed 3.5 mg/l
NSMD	TRM not required SS (0.5 ml/l) replaces TSS The monthly average concentration for TRFe shall not exceed 3.5 mg/l	SS, TRM, TSS not required The monthly average concentration for TRFe shall not exceed 3.5 mg/l
SSMR	TRM not required SS (0.5 ml/l) replaces TSS The monthly average concentration for TRFe shall not exceed 3.5 mg/l	SS, TRM, TSS not required The monthly average concentration for TRFe shall not exceed 3.5 mg/l
PPAA	TRM not required SS (0.5 ml/l) replaces TSS The monthly average concentration for TRFe shall not exceed 3.5 mg/l	SS, TRM, TSS not required The monthly average concentration for TRFe shall not exceed 3.5 mg/l
RA	Not Applicable	SS not required

4.2. Requesting APELs

To request APELs, the permittee shall indicate on the monthly DMR; that APELs are requested, the cumulative inches of precipitation for the 24 hours preceding the commencement or increase in the discharge, and the dates of the storm event and of sample collection. The source of the precipitation data shall be made available upon request. (See Section 7.6 for additional information regarding completion of the DMRs to request alternate effluent limitations). The use of APELs is conditionally approved until such time as the Cabinet determines the reported information is inadequate.

SECTION 5

IN-STREAM MONITORING REQUIREMENTS

5. IN-STREAM MONITORING REQUIREMENTS

This section of the permit establishes the requirements of an in-stream monitoring program imposed to address protection of narrative water quality standards and is based on site specific conditions. These requirements are applicable to drainage from new or expanded active surface mining areas draining to a continuous flow sediment control structure, new or expanded underground mines, and/or new or expanded coal preparation plants. New and expanded facilities are defined in Section 2.10.

In accordance with procedures established in Section 6, biological and chemical trends are used to determine the effect the permittee's activities are having on the receiving waters. The following sections address the sampling requirements of each of these analytical techniques.

5.1. Pre-Mining Survey

Prior to submission of the permit application, the applicant shall submit to DOW for review and concurrence a plan that outlines the scope of the pre-mining survey that will determine the background conditions. The Pre-Mining Survey form (PMSM) is found at: <https://eec.ky.gov/Environmental-Protection/Water/PermitCert/KPDES/Documents/KYG04PermitPage.pdf>

The form shall be submitted to the Surface Water Permits Branch/Stormwater Section. Upon DOW's concurrence with the monitoring locations, the applicant shall conduct the pre-mining survey consisting of a minimum of a single sampling event at each in-stream monitoring point identified in the pre-mining survey during the appropriate benthic macroinvertebrate index period to determine the physical, chemical, and biological background conditions. Results of analysis of the data collected shall be submitted with the eNOI-KYG04 form. The permittee shall submit the biological background report to "DOW-Biological Reports" through the DEP portal found at:

<https://dep.gateway.ky.gov/ePortal/DesktopDefault.aspx>

5.2. Biological Trend Sampling

The permittee shall commence quarterly physical and chemical monitoring, and annual biological monitoring at the in-stream monitoring locations for comparison with the pre-mining background conditions as shown on the EKCL. The data collection required in this section shall be performed concurrently with the collection of discharge samples from the contributing KPDES outfalls in accordance with the protocols established in the pre-mining survey, and shall continue until cessation of active mining. The permittee shall submit the annual benthic macroinvertebrate survey reports to "DOW-Biological Reports" through the DEP portal found at the link above. This report shall be submitted by January 28th following the sampling year, and document this submittal on the DMR under the parameter "Report Due".

The pre-mining survey establishes the background benthic macroinvertebrate index score. The Minimum Benthic Macroinvertebrate Index Threshold is established as a minimum in-stream benthic macroinvertebrate index score which shall not be lowered through the actions of the permittee. See Section 6 for additional requirements related to physical, chemical and biological trend analysis.

The following table(s) lists the required pollutants or pollutant characteristics to be monitored at each in-stream monitoring location.

IN-STREAM MONITORING REQUIREMENTS						MONITORING REQUIREMENTS	
In-stream Characteristic	Units	Minimum	Monthly Average	Daily Maximum	Maximum	Frequency	Sample Type
Flow	MGD	N/A	Report	Report	N/A	1/Quarter	Instantaneous
Total Suspended Solids ¹	mg/l	N/A	Report	Report	N/A	1/Quarter	Grab
Specific Conductivity ¹	μS/cm	N/A	Report	Report	N/A	1/Quarter	Grab
Total Sulfate (as SO ₄) ¹	mg/l	N/A	Report	Report	N/A	1/Quarter	Grab
Biotic Index ²	None	(³)	Report	Report	N/A	1/Year	Grab
Report Due ⁴	Yes=1 No=0	N/A	Report	N/A	N/A	1/Year	N/A
Total Recoverable Iron	mg/l	N/A	Report	Report	N/A	1/Year	Grab
pH	SU	Report	N/A	N/A	Report	1/Year	Grab
Total Recoverable Selenium	μg/l	N/A	Report	Report	N/A	1/Year	Grab
Turbidity	NTU	N/A	Report	Report	N/A	1/Year	Grab
Alkalinity (as CaCO ₃)	mg/l	N/A	Report	Report	N/A	1/Year	Grab
Dissolved Oxygen	mg/l	Report	N/A	N/A	N/A	1/Year	Grab
Temperature	°F	N/A	Report	Report	N/A	1/Year	Grab
Total Hardness (as CaCO ₃)	mg/l	N/A	Report	Report	N/A	1/Year	Grab

¹Background benchmarks are shown on the EKCL.

²Biotic Index represents the Benthic Macroinvertebrate Index Score. See Section 7.5 for more information regarding this stream characteristic and the sampling requirement.

³Background Benthic Macroinvertebrate Index Score and Minimum Benthic Macroinvertebrate Index Threshold are shown on the EKCL.

⁴Report if Benthic Macroinvertebrate Survey report has been submitted as required in Section 5.2.

SECTION 6

BEST MANAGEMENT PRACTICES (BMP) PLAN REQUIREMENTS

6. BEST MANAGEMENT PRACTICES (BMP) PLAN REQUIREMENTS

The permittee shall develop and implement a Best Management Practices Plan (BMPP) consistent with 401 KAR 5:065, Section 2(4).

6.1. Applicability

These conditions apply to all permittees who use, manufacture, store, handle, or discharge any pollutant listed as: (1) toxic under Section 307(a)(1) of the Clean Water Act; (2) oil, as defined in Section 311(a)(1) of the Act; (3) any pollutant listed as hazardous under Section 311 of the Act; or (4) is defined as a pollutant pursuant to KRS 224.1-010(35) and who have operations which could result in (1) the release of a hazardous substance, pollutant, or contaminant, or (2) an environmental emergency, as defined in KRS 224.1-400, as amended, or any regulation promulgated pursuant thereto (hereinafter, the "BMP pollutants"). These operations include: material storage areas; plant site runoff; in-plant transfer, process and material handling areas; loading and unloading operations; and sludge and waste disposal areas.

6.2. Plan

The permittee shall develop and implement a BMPP consistent with 401 KAR 5:065, Section 2(4)[40 CFR 122.44(k)], which prevents or minimizes the potential for the release of "BMP pollutants" from ancillary activities through site runoff; spillage or leaks, sludge or waste disposal; or drainage from raw material storage.

6.3. Implementation

The permittee shall implement the BMPP upon the commencement of regulated activity. Modifications to the plan as a result of ineffectiveness or plan changes to the facility shall be implemented as soon as possible.

Within 90 days of the effective date of this permit, the permittee shall evaluate the current BMPP and make any necessary modifications to insure its continued effectiveness.

If the site is undisturbed, a BMPP shall be developed and implemented prior to any disturbance or chemical storage on site.

6.4. General Requirements

The BMPP shall:

- 1) Be documented in narrative form, and shall include any necessary plot plans, drawings, or maps.
- 2) Establish specific objectives for the control of toxic and hazardous pollutants.
 - a) Each facility component or system shall be examined for its potential for causing a release of "BMP pollutants" due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc.
 - b) Where experience indicates a reasonable potential for equipment failure (e.g., a tank overflow or leakage), natural condition (e.g., precipitation), or other circumstances which could result in a release of "BMP pollutants", the plan should include a prediction of the direction, rate of flow, and total quantity of the pollutants which could be released from the facility as result of each condition or circumstance.
- 3) Establish specific BMPs to meet the objectives identified under paragraph 2) b) of this section, addressing each component or system capable of causing a release of "BMP pollutants".
- 4) Include any special conditions established in part 2) b) of this section.

- 5) Be reviewed by engineering staff and the site manager.

6.5. Documentation

The permittee shall maintain a copy of the BMPP at the facility, and shall make the plan available upon request to Energy and Environmental Cabinet (EEC) personnel. This plan may be in a hard copy form or electronic copy accessible by signage that includes a website.

6.6. Specific Requirements

The plan shall be consistent with the general guidance contained in the publication entitled "NPDES Best Management Practices Guidance Document", and shall include the following baseline BMPs as a minimum:

- 1) Site description;
- 2) Site Maps;
- 3) BMP Selection;
- 4) Inspection, Records, and Documentation;
- 5) Modification for Ineffectiveness;
- 6) Evaluation of BMP Effectiveness;
- 7) Groundwater Protection Plan;
- 8) Conditions of any 401 Water Quality Certification granted to the operation; and
- 9) Management of the stormwater runoff within the DNR Surface Disturbance Mining Permit boundary that is not directed to a sediment control structure.

6.6.1. Site Description

The BMPP shall include a copy of the DNR-approved mine plan submitted as part of the SMCRA permit. In addition to the DNR-approved mine plan, the BMPP shall include:

- 1) A list of outfalls (latitude, longitude, receiving water, DNR sediment control structure identification, KPDES Outfall Number, and projected activation date); and
- 2) A list of in-stream monitoring locations (latitude, longitude, and water body name) and their associated outfalls.

6.6.2. Site Maps

The BMPP shall include:

- 1) Mining and Reclamation Plan (MRP) map;
- 2) Environmental Resources Information (ERI) map; and
- 3) Site map indicating the location of any and all storage and disposal areas for petroleum-based products, or toxic or hazardous substances utilized at the mine.

6.6.3. BMP Selection

BMPs shall be selected to address the major areas of concern and the management of petroleum-based products and toxic or hazardous substances. The selection, design, construction, implementation, operation, maintenance, and effectiveness of BMPs is a critical component to the operation's Clean Water Act (CWA) requirements. The permittee must be judicious in the selection of BMPs to prevent incompatible or counterproductive results. The BMPP shall describe the selected BMPs, provide the rationale for selection, and discuss the objective of the BMPs.

6.6.4. Inspection, Records, and Documentation

The BMPP shall establish inspection schedules including procedures and frequencies, documentation requirements, and records retention locations where these records are available for review.

6.6.5. Evaluation of BMP Effectiveness

The BMPP shall establish protocols, procedures, and a schedule of review for the evaluation of the effectiveness of the selected BMPs.

Protocols: The protocols are a set of performance benchmarks which shall be narrative, numeric, biological assessment, or a combination thereof, against which the effectiveness of the BMPs are to be judged. Due to the variability of a number of factors influencing the selection of BMPs, universal performance benchmarks are not feasible, therefore site-specific standards shall be developed. The performance benchmarks are to be consistent with the goals of the CWA and SMCRA.

Procedures: The procedures shall document the process for comparing the success of the actual BMP performance versus the stated benchmark. Discharge data, receiving stream biological assessments, inspections, etc., are among the tools to be utilized in this evaluation process. If these assessments indicate that impacts to the aquatic community are occurring, then the permittee shall modify the BMPP and implement as required.

Schedule of Review: The schedule of review shall include both fixed and episode derived dates for review. Quarterly and annual evaluations of the effectiveness of the BMPs shall be performed. Episodic events, such as precipitation events of 1 inch or more, changes in the mine plan, inspections by regulatory agencies, etc., may necessitate a review of BMP performance.

6.6.6. Modification for Ineffectiveness

The BMPs and the BMPP shall be reviewed by the permittee and appropriate modifications implemented to utilize other practicable measures if any of the following events occur:

- 1) As a result of either a fixed or episodic event-driven evaluation, the permittee determines the selected BMPs are not achieving the established performance benchmarks;
- 2) As a result of an evaluation or inspection by Cabinet personnel, problems are identified; or
- 3) A release of any petroleum-based product, toxic or hazardous substance.

6.7. Modification

The permittee shall modify the BMPP whenever there is a change in the facility or change in the operation of the facility that materially increases the potential for the release of "BMP pollutants".

6.8. Additional BMP Conditions

These requirements are applicable to new and expanded active surface mining areas draining to continuous flow sediment control structure, new or expanded underground mines, or new and expanded coal preparation plants. New and expanded facilities are defined in Section 2.10.

6.8.1. BMP Evaluation Triggers

The permittee shall initiate evaluation of the currently employed BMPs when one or more of the following triggers occur:

- 1) Single annual Benthic Macroinvertebrate Index score lower than the baseline score;
- 2) Discharge and in-stream data indicate a negative trend in water quality; or
- 3) Exceedances of WET limitations

- 1) **Benthic Macroinvertebrate Index Score Trigger:** The permittee shall compare the annual score to the baseline score developed during the pre-mining survey and identified on the EKCL for each of the receiving waters evaluated. Should there be a decrease in the score from the baseline score, the permittee shall review the BMPs currently employed in accordance with

the requirements in Section 6.8.2. A single annual benthic macroinvertebrate index score lower than the Minimum Benthic Macroinvertebrate Index Threshold Score as identified on the EKCL, is a permit violation.

- 2) **Water Quality Trigger:** The permittee shall compare the rolling average of two consecutive calendar quarters of in-stream water quality samples to the baseline conditions determined during the pre-mining survey and identified on the EKCL. The permittee shall review the BMPs currently employed in accordance with the requirements in Section 6.8.2 when:
 - a) The quarterly average pollutant concentrations in the discharge are greater than the in-stream baseline concentrations for those pollutants; and
 - b) The rolling average of two consecutive calendar quarters of in-stream concentrations for the same pollutants are:
 - (1) 10 percent greater than the baseline concentrations for two consecutive calendar quarters, or
 - (2) 20 percent greater than the baseline concentrations for any calendar quarter.
- 3) **WET Trigger:** The permittee shall review the BMPs currently employed in accordance with the requirements in Section 6.8.2 when, following the procedures detailed in Section 3, the findings of a TRE indicate that one or more of the pollutants monitored in-stream was the toxicant.

6.8.2. Evaluation of BMPs

The permittee shall notify the DOW Regional Office within five (5) days that a BMP evaluation trigger has occurred and within forty-five (45) days shall complete a BMP evaluation.

At a minimum, the findings of this evaluation shall include:

- 1) A list of known practicable control measures, e.g. alternate treatment options, recycling wastewaters, land application of wastewaters, sequencing of fills for new operations, weep berms, etc., to address discharges from coal mining and/or processing operations;
- 2) For existing mining activities where changes to control measures are not practicable, a description of proposed off-site mitigation activities;
- 3) The order of implementing identified control measures;
- 4) Monitoring plans and schedules to support evaluating the effectiveness of each control measure;
- 5) A description of decision-making criteria and timelines for evaluating whether a particular measure has been effective and whether additional or different measures are required, including in-stream or effluent monitoring; and
- 6) Identification of a process for revising the BMPP should the data obtained from monitoring the effectiveness of particular control measures warrant such revisions.

6.8.3. Implementation Schedule for Modification

The permittee shall modify the BMPP in accordance with the following schedule:

- 1) Proposed modifications that do not require changes to the SMCRA permit shall be implemented within 90 days of the finalization of the evaluation.
- 2) Proposed modifications that require changes to the SMCRA permit; the permittee shall submit an application to DNR to modify the SMCRA permit within 90 days of the finalization of the evaluation, and implement the necessary changes within 180 days of DNR issuing the SMCRA permit modification.

SECTION 7

MONITORING AND REPORTING REQUIREMENTS

7. MONITORING AND REPORTING REQUIREMENTS

7.1. KPDES Outfalls

Discharge samples and measurements shall be collected at the compliance point for each KPDES Outfall identified in the EKCL. Each sample shall be representative of the volume and nature of the monitored discharge. The permittee shall notify DOW within thirty (30) days of a change in sediment control structure status or in type of drainage received by any KPDES Outfall by submitting to DOW using the eNOI-KYG04 form, available at:

<https://eec.ky.gov/Environmental-Protection/Water/PermitCert/KPDES/Documents/KYG04PermitPage.pdf>

7.2. Substantially Identical Outfalls

Substantially identical outfalls (SIOs) are outfalls that receive drainage from the same type of activities, utilize the same type of sediment control structures, are within the same watershed, are expected to produce similar effluents, and would be subject to the same effluent limitations. In such cases, DOW may authorize the permittee upon request, to monitor representative outfalls for compliance purposes (CROs). The EKCL will identify the DOW-approved CROs and those outfalls deemed to be substantially identical to them.

Requests can be made for SIOs to be represented by a single Reasonable Potential Analysis (RPA) sample. If a representative RPA sample is submitted with the renewal application for a continuous flow sediment structure, a RPA sample will still be required from each structure before it can transition to reclamation status.

No new continuous flow sediment control structures receiving Active mine drainage (i.e. UGNC, UGC, CSMD, NSMD, SSMR and PPAA) will be eligible for SIOs.

7.2.1. Permittee Requests

Requests to monitor an outfall that is representative of two or more SIOs, shall document all of the following:

- 1) Location of each of the substantially identical outfalls;
- 2) The KPDES permit outfall number assigned to each outfall;
- 3) The types of activities taking place within the contributing drainage area of each outfall, including the coal seams mined, overburden characteristics, mining methods, etc.;
- 4) Description of the sediment control structures for each outfall;
- 5) The expected frequency and volume of flow for each outfall;
- 6) Why the permittee expects the outfalls to produce similar effluents;
- 7) The outfall the permittee requests as the representative outfall;
- 8) The basis for selecting the representative outfall; and
- 9) Submit lab sheets for any data used to support estimates.

Requests shall be made using the eNOI-KYG04 form as found in Section 7.1.

7.2.2. Implementation

When utilizing a representative outfall as a CRO, the following conditions apply:

- 1) Representative outfalls are KPDES permit specific and cannot be used for reporting compliance samples on other KPDES permits;
- 2) DMRs for each SIO shall be submitted utilizing the analytical data from the corresponding CRO;
- 3) Corrective actions or additional monitoring triggered by monitoring results from the representative outfall, shall be implemented at each of the substantially identical outfalls;

- 4) No Data Indicator (NODI) Codes may be used only if the representative outfall does not discharge. See Section 7.6 of this permit for available NODI Codes.

7.2.3. Re-designation

The permittee shall re-designate a representative outfall when:

- 1) The status of the CRO outfall changes and the status of the SIO outfalls it represents does not change; or
- 2) The frequency and volume of flow and waste strength of the outfall does not accurately reflect the frequency and volume of flow or waste strength of the outfalls it represents, i.e. a SIO's discharge is no longer identical to the CRO that represents it.

Changes in the status or designation as a representative outfall for substantially identical outfalls, shall be made using the eNOI-KYG04 form as found in Section 7.1. An application is not required to remove a CRO. Submit CRO removal only requests to the Surface Water Permits Branch.

7.3. Compliance Point

The compliance point for each KPDES outfall is the nearest accessible point after final treatment, but prior to actual discharge to the receiving waters. For sediment control structures, the principal spillway or riser pipe outlet of the sediment control structure shall be this compliance point. Where multiple sediment control structures are used in series for treatment of the wastewater, the compliance point is the principal spillway or riser pipe outlet of the last sediment control structure in the series provided any internal stream segment of the series is authorized by a CWA permit to be utilized for waste treatment.

7.4. Number of Required Samples

A minimum of two (2) grab samples per physical/chemical specific parameter shall be collected each calendar month during a period of discharge resulting from a precipitation or pumpage event for: (1) active coal mining areas, (2) underground mines, (3) coal preparation plants, and (4) coal preparation plant associated areas.

For reclamation areas, the permittee shall collect a minimum of one (1) grab sample per physical/chemical specific parameter each calendar month during a period of discharge.

7.5. Sample Collection

Samples and measurements taken to determine compliance with permit effluent limitations in Section 2, shall be collected during periods of discharge. The permittee may establish a sampling schedule provided the minimum number of samples specified in Section 7.4 are obtained. In the event the minimum number of samples cannot be obtained, the permittee shall provide the necessary documentation specified in Section 7.6 to the Cabinet upon request. Samples are to be collected from the compliance point and are not to be collected from within any sediment control structure.

In-stream Monitoring – Biological Assessments

Samples for physical and chemical parameters shall be collected in accordance with the following Standard Operating Procedures (SOPs): (1) Sampling Surface Water Quality in Lotic Systems, (2) In situ Quality Measurements and Meter Calibration, (3) Sample Control and Management, and (4) Measuring Stream Discharge.

Biological sampling shall be performed annually during the appropriate index period; i.e. Headwater – Feb 15th thru May 31st; Wadeable – May 1 thru Sept 30th. Samples shall be collected in accordance with: “Methods for Conducting Resource Extraction Individual Permit Intensive Surveys in Non-OSRW Streams of the Eastern Kentucky Coalfields”.

These SOPs may be found at:

<https://eec.ky.gov/Environmental-Protection/Water/PermitCert/KPDES/Pages/Mining.aspx>

All compliance biological monitoring shall be performed within a 15 day window of the background sampling date. Should this window go outside of the index period, a variance may be requested from DOW’s Water Quality Branch.

7.6. No Data Reporting

If the permittee is unable to collect one or more of the required number of samples specified in Section 7.4, the permittee shall report the appropriate No Data Indicator (NODI) Code for each uncollected sample on the monthly DMR for that outfall. The permittee shall document its claim that only one, or no discharge occurred during the monitoring period. Such documentation shall be made available to the cabinet upon request. The use of a NODI Code is conditionally approved until such time as the Cabinet determines the submitted documentation for the use of that NODI Code is inadequate. When using a NODI Code, the permittee shall use the “Comments” field of the DMR to provide the additional documentation as requested to support the use of the NODI Code.

NODI Codes are used in EPA’s Integrated Compliance Information System (ICIS) to report a No Data on a DMR. The following table lists the NODI Codes that DOW has determined to be appropriate for use on coal related DMRs.

TABLE 10.	
NODI Code	Definition
2	Operation Shutdown/Outfall Removed
5	Frozen Conditions
9	Conditional Monitoring – Not Required This Period
B	Below Detection Limit for Total Residual Chlorine only
C	No Discharge
E	Analysis Not Conducted/No Sample
F	Insufficient Flow For Sampling
I	Land Applied
J	Recycled –Water-Closed System
K	Natural Disaster
M	Laboratory Error
N	Not Constructed/Not Certified
V	Weather Related

The circumstances under which each code is used and the required documentation in addition to the documentation and certification requirements of Sections 9.10 and 9.11 are as follows:

NODI Code 2

This code is to be used when the operation has been shutdown as a result of enforcement action or bond forfeiture and the permittee is denied access to the site, or when the outfall has received approval from DNR to remove the pond and it has been physically removed from the site. Additional documentation to be available upon request, shall include the notice issued by the enforcing agency denying access. The permittee shall note in the “Comments” field on the DMR, the date the outfall was removed.

NODI Code 5

This code is to be used when the discharge or outfall structure is frozen. Additional documentation to be available upon request includes: (1) dated photographs; and (2) a narrative of the severity and duration of the condition shall be included.

NODI Code 9

The use of this code serves multiple purposes:

- 1) On a parameter by parameter basis when requesting APELs for a precipitation event for Total Recoverable Iron, Total Recoverable Manganese, Total Suspended Solids, and Settleable Solids;
- 2) When not requesting APELs for a precipitation event for Precipitation Volume, Settleable Solids, Date of Storm Event and Date of Sample Collection;
- 3) When fish tissue analysis for selenium residue is not triggered;
- 4) When a shared outfall is not receiving contributing inflow, the permittee shall describe the situation in the "Comments" field on the DMR; or
- 5) When biology is not required this year due to no disturbance on site (prior approval must be obtained from the DOW Water Quality Branch).

NODI Code B

This code is to be used when the Minimum Detection Limit cannot be achieved for only the parameter, Total Residual Chlorine.

NODI Code C

This code is to be used when there are no discharges during the monitoring period from a sediment control structure due to its design, construction, or maintenance and operation. Additional documentation to be available upon request includes: (1) Certification that the sediment control structures were constructed, maintained and operated in accordance with DNR approved performance standards; and (2) Daily precipitation information indicating that no storm event exceeded the 10 year, 24 hour precipitation event.

NODI Code E

This code is to be used when no sample has been taken, or no analysis was conducted.

NODI Code F

This code is specific to WET testing and is to be used when the discharge ceases prior to completion of the sample requirements specified in Section 3, or no sample could be collected due to the shallowness of the discharge. Additional documentation to be available upon request includes: (1) the time and date of commencement of sample collection, and (2) the time and date the discharge ceased.

NODI Code I

This code is to be used when a sediment control structure does not discharge during a monitoring period due to the land application of the effluent to the surface of a fill or other mining area. Additional documentation to be available upon request includes: (1) description of application area; (2) daily application rates; (3) daily precipitation volumes; and (4) the source of the precipitation data.

NODI Code J

This code is to be used when water from slurry disposal areas or sediment control structures associated with a coal preparation plant (coal washer) is utilized as make-up water, i.e. recycled within the washer circuitry. Additional documentation to be available upon request includes: (1) designed make-up water

rate required for washer; (2) sources of make-up water; (3) daily volume removed from structure; (4) daily precipitation volumes; and (5) the source of the precipitation data.

NODI Code K

This code is to be used when the outfall is destroyed or inaccessible due to a natural disaster such as flooding, tornado, etc. Additional documentation to be available on request includes: (1) dated photographs; and (2) a narrative of the severity and duration of the condition shall be included. The permittee shall note in the "Comments" field on the DMR, the natural disaster that occurred and date the outfall was destroyed or inaccessible.

NODI Code M

This code is to be used when the sample is deemed invalid due to laboratory error. The permittee shall note in the "Comments" field on the DMR, the laboratory error that occurred.

NODI Code N

This code is to be used when an outfall has never been constructed or certified by the Division of Mine Reclamation and Enforcement (DMRE).

NODI Code V

This code is to be used when an outfall is inaccessible due to extreme weather conditions. Additional documentation to be available upon request includes: (1) a description of the weather conditions; (2) dated photographs of the conditions; and (3) duration of the conditions preventing access. The permittee shall note in the "Comments" field on the DMR, the weather event that occurred and the dates associated with the event.

7.7. Settleable Solids (SS) Testing Procedures

Fill an Imhoff cone to the one (1) liter mark with a thoroughly mixed sample. Allow to settle undisturbed for 45 minutes. Gently stir along the inside surface of the cone with a stirring rod. Allow to settle undisturbed for 15 minutes longer. Record the volume of settled material in the cone as milliliters per liter. Where a separation of settleable and floating materials occurs, do not include the floating material as settleable.

7.8. Sufficiently Sensitive Analytical Methods

Analytical methods utilized to demonstrate compliance with the effluent limitations established in this permit, shall be sufficiently sensitive to measure pollutant levels using the Minimum Reporting Level (MRL) which is at or below the required effluent limit. In the instance where an EPA-approved method does not exist that has a MRL at or below the established effluent limitation, the permittee shall use the EPA-approved method with a demonstrated MRL that is nearest to the established effluent limit. It is the responsibility of the permittee to demonstrate compliance with permit parameter limitations by utilization of sufficiently sensitive analytical methods.

MRL is defined as: The lowest concentration of an analyte (i.e. permit parameter) that can be reliably quantified that is greater than the method detection limit, of sufficient accuracy and precision to meet the intended purpose, and meeting acceptable quality control criteria for the analyte at this concentration. This defined concentration can be no lower than the concentration of the lowest calibration standard for that analyte or, in non-calibrated methods, the limitations defined by the equipment and volumes utilized.

Sufficiently Sensitive Method is defined by EPA in the Federal Register notice as:

- 1) The method minimum level (Kentucky defined as minimum reporting level – MRL) is at or below the level of the applicable water quality criterion or permit limitation for the measured pollutant or pollutant parameter;
- 2) In the case of permit applications, the method minimum level (MRL) is above the applicable water quality criterion, but the amount of the pollutant or pollutant parameter in a facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or
- 3) The method has the lowest minimum level (MRL) of the EPA-approved analytical methods.

7.9. Certified Laboratory Requirements

All laboratory analyses and tests required to demonstrate compliance with the conditions of this permit shall be performed by EEC certified general wastewater laboratories and EEC certified field-only laboratories. A list of certified laboratories can be obtained from the DOW Laboratory Certification Section.

7.10. Submission of DMRs

Monitoring results obtained during each monitoring period must be reported. The completed DMR for each monitoring period must be submitted to the DOW approved electronic system no later than midnight on the 28th day of the month following the monitoring period for which monitoring results were obtained.

For more information regarding electronic submittal of DMRs, please visit the Division's website at: <https://eec.ky.gov/Environmental-Protection/Water/SubmitReport/Pages/NetDMR.aspx> or contact the DMR Coordinator at (502) 564-3410.

7.11. Submission of WET Testing Reports

WET test results obtained during each monitoring period for WET testing shall be reported using the Kentucky Toxicity Test Report Sheet available at: <https://eec.ky.gov/Environmental-Protection/Water/PermitCert/KPDES/Documents/KYG04PermitPage.pdf>

The permittee shall submit all toxicity test reports, including incomplete or invalid tests, within thirty (30) days of the completion or termination of the test to "WET Testing" through the ePortal found at: <https://eec.ky.gov/Environmental-Protection/Pages/services.aspx>

7.12. Effluent Data for New Operations

Within two (2) years of commencing discharge from new operations, the permittee shall submit to DOW actual discharge data for the pollutants required by the eNOI.

New and expanded facilities are defined in Section 2.10.

SECTION 8

OTHER REQUIREMENTS

8. OTHER REQUIREMENTS

8.1. Schedule of Compliance

The permittee shall attain compliance with all requirements of this permit on the effective date of this permit unless otherwise stated.

8.2. Other Permits

This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal, and local agencies.

8.3. Electronic Notice of Intent (eNOI) Requirements

8.3.1. eNOI

Operators seeking to obtain a new coverage, to modify an existing coverage, or to renew an existing coverage shall use DOW's electronic web based eNOI-KYG04 form. All related forms and documents are available at:

<https://eec.ky.gov/Environmental-Protection/Water/PermitCert/KPDES/Documents/KYG04PermitPage.pdf>

The Notice of Intent link will take you to the Kentucky Online Gateway portal where you will be required to create an account to access the eForms. DOW shall not process any NOI that is incomplete, inaccurate, or in an incorrect format.

8.3.2. eNOI Contents

Electronic form eNOI-KYG04 is comprised of the following sections: (1) Facility Operator Information, (2) General Site Location Information, (3) Specific Site Activity Information, (4) Outfall Information, (5) Other Effluent Data, (6) In-Stream Monitoring Locations – Eastern KY Only, (7) Other Environmental Approvals and Permit Information, (8) Discharge Monitoring Report (DMR) Contact Information, (9) NOI Preparer Information (10) Attachments, and (11) Certification.

8.3.3. eNOI Submission Deadlines

Operators seeking initial coverage for a new facility shall electronically submit the eNOI-KYG04 form and required attachments (Mining Reclamation Plan (MRP) map, and a completed Socioeconomic Demonstration Alternatives Analysis (SDAA) form) a minimum of 90 days prior to commencement of discharge.

Operators seeking modification of an existing coverage to address facility modifications shall electronically submit an updated eNOI-KYG04 form and required attachments (MRP map, and completed SDAA form) a minimum of 90 days prior to the modification of the facility.

Operators seeking renewal of existing coverages shall electronically submit an updated eNOI-KYG04 form and MRP map within 90 days of the effective date of this permit. Failure to submit the updated eNOI-KYG04 form within the specified timeframe may result in the termination of coverage.

8.4. Continuation of Expiring Permit

This permit shall be continued in effect and enforceable after the expiration date of the permit provided that the permittee submits a timely and complete eNOI in accordance with 401 KAR 5:060, Section 2(4). However, new or expanded coverages cannot be authorized until the permit is reissued.

8.5. Antidegradation

For those discharges subject to the provisions of 401 KAR 10:030 Section 1(3)(b)5, the permittee shall install, operate, and maintain wastewater treatment facilities consistent with those identified in the SDAA submitted with the eNOI-KYG04.

8.6. Discharge and Monitoring Point Accessibility

The permittee is required to conduct monitoring that is representative of the regulated discharges. Additionally, in accordance with the conditions that apply to all permits as stated in Section 9.9, the permittee shall allow authorized agency representatives to inspect the facility and collect samples to determine compliance. In order for such monitoring to be conducted either by the permittee or authorized agency personnel, all monitoring and discharge points required by this permit shall be readily and safely accessible.

8.7. Additional Conditions Specific to Mining Permits

The permittee shall notify the Director as soon as they know or have reason to believe that toxic pollutants not limited in the permit, have been or shall be discharged in excess of the highest of the following notification levels:

TABLE 11.		
POLLUTANT	ROUTINE/FREQUENT	NON-ROUTINE/INFREQUENT
Any Toxic Pollutant	100 µg/l ¹	500 µg/l ¹
Acrolein	200 µg/l	500 µg/l ¹
Acrylonitrile	200 µg/l	500 µg/l ¹
2,4-dinitrophenol	500 µg/l	500 µg/l ¹
2-methyl-4,6-dinitrophenol	500 µg/l	500 µg/l ¹
Antimony	1 mg/l	1 mg/l
Pollutant reported in permit application	Five (5) times the maximum concentration value	Ten (10) times the maximum concentration value

¹Or level established by the Director.

8.8. Commingling of Waste Streams

Where wastestreams from any drainage area covered by this permit are combined for treatment or discharge with wastestreams from another drainage area, the concentration of each pollutant in the combined discharge may not exceed the most stringent limitations for that pollutant applicable to any component wastestream of the discharge. This requirement is consistent with the requirements of 401 KAR 5:065, Section 2(9).

8.9. Reopener Clause

This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved in accordance with 401 KAR 5:050 through 5:080, if the effluent standard or limitation so issued or approved:

- 1) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- 2) Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of KRS Chapter 224 when applicable.

8.10. Certified Operator

Pursuant to 401 KAR 5:010, Section 1, a sanitary treatment plant with a design capacity of less than or equal to 50,000 gallons per day shall be under the primary responsibility of a certified operator holding an active Class I, II, III, or IV treatment certificate.

8.11. Drinking Water Systems (DWS) Intake

In addition to the requirements of Section 2 of this permit, coal mining and/or processing operations that discharge within 5 miles upstream of an existing domestic water supply intake shall incorporate within the operation's BMPP, language addressing catastrophic releases and the notification procedures.

The language shall be included under the Specific Conditions Section of the BMP Plan and shall provide the following:

- 1) The criteria for determining a catastrophic release;
- 2) The notification method(s) to be used to inform the affected DWS intake that a catastrophic release has occurred;
- 3) The names, telephone numbers, and e-mail addresses of the contacts with the subject water supply; and
- 4) The names, telephone numbers, and e-mail addresses of the contacts with the permittee.

8.12. Stormwater Management

All stormwater runoff within the boundary of the SMCRA Permit shall be, to the extent possible, diverted to sediment control structures. Stormwater that cannot be diverted shall be addressed under the BMP Plan. During the initial phases of site preparation, BMPs shall be employed to control sediment until permanent sediment control structures are constructed and placed in operation.

SECTION 9

STANDARD CONDITIONS

9. STANDARD CONDITIONS

The following conditions apply to all KPDES permits.

9.1. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of KRS Chapter 224 and is grounds for enforcement action; for permit termination, revocation and reissuance, modification, or denial of a permit renewal application. Any person who violates applicable statutes, who fails to perform any duty imposed, or who violates any determination, permit, administrative regulation, or order of the cabinet promulgated pursuant thereto shall be liable for a civil penalty as provided at KRS 224.99.010.

9.2. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit.

9.3. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

9.4. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

9.5. Proper Operation and Maintenance

The permittee shall at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

9.6. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, notification of planned changes or anticipated noncompliance does not stay any permit condition.

9.7. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

9.8. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Director upon request, copies of records required to be kept by this permit.

9.9. Inspection and Entry

The permittee shall allow the Director or an authorized representative (including an authorized contractor acting as a representative of the Director), upon presentation of credentials and other documents as may be required by law, to:

- 1) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- 2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- 3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- 4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by KRS 224, any substances or parameters at any location.

9.10. Monitoring and Records

1) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

2) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities which shall be retained for a period of at least five (5) years (or longer as required by 401 KAR 5:065, Section 2(10) [40 CFR 503]), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

3) Records of monitoring information shall include:

- a) The date, exact place, and time of sampling or measurements;
- b) The individual(s) who performed the sampling or measurements;
- c) The date(s) analyses were performed;
- d) The individual(s) who performed the analyses;
- e) The analytical techniques or methods used; and
- f) The results of such analyses.

4) Monitoring must be conducted according to test procedures approved under 401 KAR 5:065, Section 2(8) [40 CFR 136] unless another method is required under 401 KAR 5:065, Section 2(9) or (10) [40 CFR subchapters N or O].

5) KRS 224.99-010 provides that any person who knowingly violates KRS 224.70-110 or other enumerated statutes, or who knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, shall be guilty of a Class D felony and, upon conviction, shall be punished by a fine of not more than \$25,000, or by imprisonment for not less than one (1) year and not more than five (5) years, or by both fine and imprisonment for each separate violation. Each day upon which a violation occurs shall constitute a separate violation.

9.11. Signatory Requirement

1) All applications, reports, or information submitted to the Director shall be signed and certified pursuant to 401 KAR 5:060, Section 4 [40 CFR 122.22].

2) KRS 224.99-010 provides that any person who knowingly provides false information in any document filed or required to be maintained under KRS Chapter 224 shall be guilty of a Class D felony and upon conviction thereof, shall be punished by a fine not to exceed twenty-five thousand dollars (\$25,000), or by imprisonment, or by fine and imprisonment, for each separate violation. Each day upon which a violation occurs shall constitute a separate violation.

9.12. Reporting Requirements

9.12.1. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- 1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in KRS 224.16-050 [40 CFR 122.29(b)];
- 2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under KRS 224.16-050 [40 CFR 122.42 (a)(1)]; or
- 3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

9.12.2. Anticipated Noncompliance

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

9.12.3. Transfers

This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under KRS 224 [40 CFR 122.61]; in some cases, modification or revocation and reissuance is mandatory.

9.12.4. Monitoring Reports

Monitoring results shall be reported at the intervals specified elsewhere in this permit.

- 1) Monitoring results must be reported on a DMR or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices.
- 2) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 401 KAR 5:065, Section 2(8) [40 CFR 136], or another method required for an industry-specific waste stream under 401 KAR 5:065, Section 2(9) or (10) [40 CFR subchapters N or O], the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.
- 3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

9.12.5. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit, shall be submitted no later than fourteen (14) days following each schedule date.

9.12.6. Twenty-four Hour Reporting

1) The permittee shall report any noncompliance which may endanger health or the environment to the DOW Regional Office. Any information shall be provided orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

2) The following shall be included as information which must be reported within twenty-four (24) hours under this paragraph:

- a) Any unanticipated bypass which exceeds any effluent limitation in the permit [40 CFR 122.41 (g)].
- b) Any upset which exceeds any effluent limitation in the permit.
- c) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within twenty-four (24) hours.

3) The Director may waive the written report on a case-by-case basis under 40 CFR 122.41 (l), if the oral report has been received within twenty-four (24) hours.

9.12.7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Sections 9.12.1, 9.12.4, 9.12.5 and 9.12.6, at the time monitoring reports are submitted. The reports shall contain the information listed in Section 9.12.6.

9.12.8. Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

9.13. Bypass**9.13.1. Definitions**

- 1) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
- 2) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

9.13.2. Bypass Not Exceeding Limitations

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Section 9.13.3 and 9.13.4.

9.13.3. Notice

- 1) Anticipated bypass: If the permittee knows in advance of the need for a bypass, it shall submit prior notice, and if possible at least ten days before the date of the bypass.
- 2) Unanticipated bypass: The permittee shall submit notice of an unanticipated bypass as required in Section 9.12.6.

9.13.4. Prohibition of Bypass

- 1) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:
 - a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - c) The permittee submitted notices as required under Section 9.13.3.
- 2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three (3) conditions listed above in Section 9.13.4.

9.14. Upset**9.14.1. Definition**

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

9.14.2. Effect of an Upset

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations, if the requirements of Section 9.14.3 are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

9.14.3. Conditions Necessary for a Demonstration of Upset

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- 1) An upset occurred and that the permittee can identify the cause(s) of the upset;
- 2) The permitted facility was at the time being properly operated;
- 3) The permittee submitted notice of the upset as required in Section 9.12.6; and
- 4) The permittee complied with any remedial measures required under Section 9.4.

9.14.4. Burden of Proof

In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.